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|---|---------------|----------------------|---------------------|------------------|
| APPLICATION NO.   | FILING DATE   | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
| 10/540,892  | 06/27/2005    | Sammo Cho            | CU-4288 WWP         | 1970             |
| 26530   | 7590          | 11/26/2008           | EXAMINER            |                  |
| LADAS & PARRY LLP<br>224 SOUTH MICHIGAN AVENUE<br>SUITE 1600<br>CHICAGO, IL 60604 |               |                      | HA, DAC V           |                  |
| ART UNIT  | PAPER NUMBER  |                      |                     | 2611             |
| MAIL DATE   | DELIVERY MODE |                      |                     |                  |
| 11/26/2008  | PAPER         |                      |                     |                  |

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

|                              |                                      |                                   |
|------------------------------|--------------------------------------|-----------------------------------|
| <b>Office Action Summary</b> | <b>Application No.</b><br>10/540,892 | <b>Applicant(s)</b><br>CHO ET AL. |
|                              | <b>Examiner</b><br>Dac V. Ha         | <b>Art Unit</b><br>2611           |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
  - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
  - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) Responsive to communication(s) filed on 29 September 2008.
- 2a) This action is FINAL.      2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) Claim(s) 1-8 is/are pending in the application.
- 4a) Of the above claim(s) 3,4,7 and 8 is/are withdrawn from consideration.
- 5) Claim(s) \_\_\_\_\_ is/are allowed.
- 6) Claim(s) 1-2, 5-6 is/are rejected.
- 7) Claim(s) \_\_\_\_\_ is/are objected to.
- 8) Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on \_\_\_\_\_ is/are: a) accepted or b) objected to by the Examiner.  
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) All    b) Some \* c) None of:  
 1. Certified copies of the priority documents have been received.  
 2. Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- 1) Notice of References Cited (PTO-892)
- 2) Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) Information Disclosure Statement(s) (PTO-166/08)  
 Paper No(s)/Mail Date \_\_\_\_\_
- 4) Interview Summary (PTO-413)  
 Paper No(s)/Mail Date \_\_\_\_\_
- 5) Notice of Informal Patent Application
- 6) Other: \_\_\_\_\_

## DETAILED ACTION

### ***Claim Rejections - 35 USC § 101***

1. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

Claims 5-6 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter. According to USPTO current guidance, a process (the steps in the method claims of the present application) must be tied to another statutory class (such as a particular apparatus) to meet the requirement of a patent eligible process under § 101.

### ***Claim Rejections - 35 USC § 103***

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. **Claims 1-2, 5-6** are rejected under 35 U.S.C. 103(a) as being unpatentable over Murata (US 6,470,004) in view of Norr (US 7,085,377).

Re claim 1, Murata discloses:

"a capacity managing means for dividing the source-coded data into divided data for a plurality of channels in case that an available data capacity for transmitting the source-coded data does not exist in one channel but sum of available data capacities of several channels can accommodate the source-coded data, and adding header

information to the divided data" in Fig. 3, element 41; col. 2, lines 10-17; col. 3, lines 38-58; col. 4, lines 1-10, 17-28; col. 5, lines 1-8, 15-17 in that, when the amount of data to be transmitted exceed the capacity of one channel (the assigned channel), an available data channel of other user is used in addition to the assigned channel for transmitting the data; and indication of such a situation is added in the header for assisting the receiver for correctly receiving the signal).

"a transmitting means" (Fig. 2, elements 44, 45).

Murata differs from the claimed invention in that it does not teach "a source encoding means for encoding data to be transmitted and generating source-coded data"; a channel encoding means for encoding the divided data according to channel environment and generating channel-coded data; and multiplexing, modulating and transmitting the channel-coded data through multiple frequency bands and multiple broadcasting sites".

However, these claimed subject matter are fundamental processing blocks of a digital communication, particularly, in the transmitter chain. Norr, in the same field of endeavor, teaches an example of "source encoding means for encoding data to be transmitted and generating source-coded data" in Fig. 3, element 202; "a channel encoding means for encoding the divided data according to channel environment and generating channel-coded data" in Fig. 3, element 218; and "multiplexing, modulating and transmitting the channel-coded data through multiple frequency bands and multiple broadcasting sites" in Fig. 3, element 220; col. 1, lines 7-51.

Therefore, it would have been obvious to a person of ordinary skill in the art at the time of the invention to incorporate the fundamental processing blocks of the transmitter chain, taught by Norr, into Murata, depending on a specific application, and a predictable result still can be expected.

**Re claim 2,** Murata further discloses "wherein the capacity managing means stores information of available capacity and unavailable capacity for each frequency band, divides the source-coded data in case that an available data capacity for transmitting the source-coded data does not exist in one channel but sum of the available data capacities of multiple channels can accommodate the source-coded data, and adds the header information to the divided data in a data packet so as to reconstruct the data in the receiving apparatus" in Fig. 2; Fig. 3, element 41; col. 4, lines 19-21, 32-35; col. 3, lines 51-58.

**Re claim 5,** see corresponding apparatus claim 1 above. Further, Norr teaches the data to be transmitted includes "image data and audio data" in col. 2, liens 44-49.

**Re claim 6,** see corresponding apparatus claim 2 above.

### ***Conclusion***

4. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Tiedemann, Jr. et al. (US 5,859,840) (particularly relevant).

Ikeda et al. (US 6,973,118)

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Dac V. Ha whose telephone number is 571-272-3040. The examiner can normally be reached on 4/4.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Payne can be reached on 571-272-3024. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Dac V. Ha/  
Primary Examiner, Art Unit 2611